

REMARKS

Claims 2 – 13 are pending in the present Application. Claim 9 has been canceled, Claims 2, 5, 6, 10, 11, and 12 have been amended, and Claims 14 – 18 have been added, leaving Claims 2 – 8 and 10 – 18 for consideration upon entry of the present Amendment.

Claims 11 and 12 have been amended to place these claims in independent form and for clarity. Support for this amendment can at least be found in Paragraph [0093] as originally filed.

Claims 2, 5, 6, and 10 have merely been amended to change their dependencies.

Claim 14 has been added to further identify the pallet. Support for this claim can at least be found in Paragraph [0046].

Claim 15 has been added to further identify the pallet. Support for this claim can at least be found in Paragraph [0093].

Claim 16 has been added further identify the pallet. Support for this claim can at least be found in Paragraph [0072].

Claim 17 has been added further identify the pallet. Support for this claim can at least be found in Paragraph [0091].

Claim 18 has been added further identify the pallet. Support for this claim can at least be found in Paragraph [0087].

No new matter has been introduced by these amendments or new claims.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Information Disclosure Statement

Applicants note that the Examiner returned the form PTO-A820 form the IDS submitted in December 2003. However, it is not clear if all of the references on page 2 of 12 were fully considered. Applicants respectfully request that the art submitted on page 2 of 12 also be considered and a fully initialed page 2 of 12 of PTO Form A820 be returned to the Applicants.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 11 and 12 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the expression “the specifications of the

Virginia Tech Protocol” (Claim 11) and the expression “the GMA guidelines” (Claim 12) are alleged to have no definite antecedent basis in the claims. The claims have been amended to refer to Virginia Tech Protocol specifications and GMA guidelines. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1, 2, 5, 6 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 3,835,792. Applicants respectfully traverse this rejection.

Applicants note that Claim 1 was cancelled in the Amendment submitted in response to the Office Action dated December 12, 2005, thereby rendering the rejection based on this claim moot. Furthermore, Claims 2, 5, and 6 depend from a non-rejected claim. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 9-13, 2, 5, and 6 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over U.S. Patent No. 3,835,792 to Wharton. Claims 3 and 4 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Wharton in further view of U.S. Patent No. 3,685,463 to Francis. Claims 7 and 8 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Wharton in further view of U.S. Patent No. 4,050,664 to Daley. Applicants respectfully traverse these rejections.

It is first noted that Claim 9 was cancelled, thus rendering rejections based on this claim moot. Furthermore, it is noted that dependent claims 2, 5, 6, 10, and 13 are dependent on patentable Claim 11 and are, by definition, allowable.

The Office Action alleges that

The use of different degrees of weight per area percentages are matters of desirability and choice and materials used which would have been well within the level of ordinary skill in the art at the time of the invention since such results are matters of materials and engineering mechanics, thereby providing structure as claimed ...

(Office Action dated May 25, 2006, hereinafter 05/06, pages 3-4) Applicants respectfully disagree that the choice is merely desirability. There has been a long felt need to replace wooden

pallets. However, no one was previously able to meet both weight and structural integrity requirements of pallet specifications. Previously, as is discussed throughout the present specification, only one of these criteria were attained in a non-wooden pallet:

Plastic pallets provide an alternative to wooden pallets and are superior to the wooden pallets in many respects. *The weight of the plastic pallet, however, remains a problem because of the need for significant amounts of reinforcement materials in the decks of the pallet to enable it to meet the load bearing capability of the wooden pallet*, particularly when the loaded pallets are stored in racks where the pallet is supported only by rails at two edges and suspended therebetween. If both decks are reinforced, the weight requirement of the pallet is exceeded. Therefore, manufacturers of rackable plastic pallets currently limit the use of reinforcements to either the upper or lower deck. If the support is in the lower deck, the pallet often has difficulty passing the deflection limit specification while being lifted from the underside of the upper deck. It may also fail the deflection limit specification due to upper deck sag under static load, which can reduce fork lift gap size. If the support is placed only in the upper deck, the pallet will fail when lifted from below the lower deck or when riding on a chain conveyor system, which requires the lower deck to be rigid.

(Paragraph [0008]; *emphasis added*)

Wharton is directed to a pallet having a corrugated structure formed of thermoplastic structural foam. (Abstract; Col. 2, lines 19 – 26) Wharton discloses that their pallet can weight as little as 38 pounds (with a deck size of 40 inches by 48 inches). (Col. 7, lines 53 – 60) However, they do not teach the structural integrity requirements met by the present pallets; i.e., the Virginia Tech Protocol and GMA specifications. Wharton teaches no more than Paragraph [0008] of the present application; essentially that there are issues with wooden pallets, there is a need in the art to design other than wooden pallets, that plastic has been used, and that plastic pallets can be light. However, these previous “light” pallets did not meet the load bearing requirements.

A *prima facie* case of obviousness requires that all elements of the invention are disclosed in the prior art; that the prior art relied upon contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). Wharton

fails to disclose a collapsible pallet wherein the pallet meets the specifications of the Virginia Tech Protocol.

Applicants' novel Claim 11 claims a pallet that meets specific weight limitations while also meeting specific structural integrity protocols. There is no teaching or suggestion that the pallet of Wharton meets these claim limitations.

It is stated in OA 05/06 that "the use of different degrees of weight percentages are matters of desirability which is routinely taught in strength of materials and engineering courses depending upon the parameter needed". (Page 4) Although the amount of material used will change the weight percent, and the amount could be chosen to attain a desired degree of weight percent, such choice in no way ensures attaining a desired structural integrity. Wharton even notes structural integrity issues: "corrugated deck is weaker in bending strength and stiffness..." (Col. 1, lines 29 – 31) The present claims combine weight and structural integrity elements in a single pallet. If mere choice of material based was the issue, and Wharton's pallet met the long felt needs of the industry, why hasn't Wharton's pallet technology replaced the wooden pallet? Why is replacement of the wooden pallet still an issue? If the materials are merely choices that were taught in engineering courses, why is Battelle National Laboratory performing testing studies on types of pallets (see, for example, <http://www.ohiodnr.com/recycling/pdf/batt1.pdf>).

Attaining a pallet with the claimed limitations was not "well within the level of ordinary skill"; it is not obvious. As discussed above, artisans with ordinary skill in the art were unable to produce plastic pallets, which meet *both* the weight limitations and the specifications of the Virginia Tech Protocol or GMA guidelines, e.g., structural integrity and deflection.

Obviousness is not based upon what an artisan could do or what an artisan may try, but is based upon what an artisan would be motivated to do with an expectation of success. "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, No. 04-1616 (CAFC March 22, 2006) citing *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002); and *In re Rouffett*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998). "When the Board does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, [it is] infer[ed] that the Board used hindsight to conclude that the invention was obvious."

Id. Additionally, “[a]lthough the suggestion to combine references may flow from the nature of the problem, ‘[d]efining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness.’” (internal citation omitted) *Id.*, quoting *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881 (Fed. Cir. 1998); *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992).

There is no teaching or suggestion in the prior art of record that meets the claim limitations. Applicants have filled the long felt need that they have discussed throughout the application. Applicants teach and claim a unique plastic pallet design that meets Virginia Tech Protocol specifications and/or GMA guidelines. As such, the claimed pallet is novel and non-obvious. No motivation or expectation of success on how to modify the prior art to attain the claimed patent has been provided. Hence, no *prima facie* case of obviousness has been established. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Wharton in further view of Francis.

Claim 3 is directed to a pallet comprising an upper deck, a lower deck, and a foot member. The foot member comprises a first foot half disposed on said upper deck and a second foot half disposed on said lower deck. The first foot half having a pin disposed thereon. The second foot half has a hole disposed therein for receiving the pin, wherein said hole is defined by a wider opening on one end and a narrower opening on an opposing end to define a keyhole shape.

While Wharton teaches a plastic pallet, Wharton fails to teach a second foot half having a hole defined by a keyhole shape. Therefore, Francis is relied upon to teach a keyhole slot and pin structure. (OA 05/06, page 4)

As noted above, a *prima facie* case of obviousness requires that all elements of the invention are disclosed in the prior art; that the prior art relied upon contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494,

496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Here, it is alleged that the modification of Wharton would be obvious in view of Francis. However, Francis does not teach first and second foot elements that connect or a first deck with a first foot half and a second deck with a second foot half. Francis has a single foot element (legs 20) and three panel members (16, 17, 18). Francis does teach a foot member with a keyhole shaped hole. Hence, Francis fails to remedy the deficiencies of Wharton, and it is not clear even how an artisan would combine these references.

Francis has a multiple panels that lay-up with a single foot that extends through portions of some of the panels, and does not teach foot members that connect together. Wharton has foot portions that connect together does not teach multilayer panels that lay-up on top of each other. There is no motivation pick a portion of Francis and use it on a different element of Wharton in a wholly different pallet design. In other words, there is no motivation to change the design of the foot members of Wharton and no motivation to pick a deck hole shape of Francis to modify a foot hole shape of Wharton.

The Examiner contends, “it is the conventionality of the connectors that provides the motivation as they are both conventional alternative structures used in the same intended purpose.” (OA 05/05) However, the Examiner provides no articulated reasoning or explanation of how the two components are “alternative structures”. Applicants note that obviousness is not based upon what an artisan could do or what an artisan may try, but is based upon what an artisan would be motivated to do with an expectation of success. “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, No. 04-1616 (CAFC March 22, 2006) citing *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002); and *In re Rouffett*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998). “When the [Examiner] does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, [it is] infer[ed] that the [Examiner] used hindsight to conclude that the invention was obvious.” *Id.* Here, the Examiner relies upon a merely conclusory statement, e.g., that the connectors are “both conventional alternative structures used in the same intended purpose” and as such, fails to establish a *prima*

facie case of obviousness. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 7 and 8 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Wharton in further view of Daley. Applicants respectfully traverse this rejection.

Claims 7 and 8 are directed to a pallet comprising an upper deck, a lower deck and a foot member. The foot member comprises halves that comprise foam.

Since it is admitted that Wharton fails to teach foot halves comprising foam, Daley is relied upon to teach “the use of providing foam [is] old.” (Office Action, page 4)

Daley is directed to supports (2) having a strapping member (10) that attaches to the support and around an object (1). (See Figures 1 and 2) The support (2) further comprises foam portions (4) and (6) disposed in the support (2). (Col. 2, lines 27 – 33; and Figure 2) Based upon the use of foam in the support of Daley, it is alleged that to modify the structure of Wharton to include foam inserts would be obvious. (OA 05/06, page 5)

As noted above, obviousness is based upon what an artisan would be motivated to do, with an expectation of success, from the teachings of the art at the time of the present invention. Firstly, Daley is not a pallet and there is no motivation to choose the foam insert of Daley to modify the pallet of Wharton to include foam in the foot. Additionally, Wharton appears to teach an open structure (e.g., see Figure 5), while Daley put foam material at ends of a support member. (Figure 2, Col. 2, lines 27 – 33) There is no motivation to choose a support member of Daley, decide the foam material is a good material to use in Wharton (no motivation), choose the foot member of Wharton among the various components of the pallet (no motivation), and dispose the foam into the open foot member (no motivation or expectation of success).

It does not matter if an artisan could try to modify the pallet of Wharton. It is only significant if an artisan would be motivated to modify the pallet of Wharton, with an expectation of success, and that the motivated modification would result in the presently claimed pallet. Here, there is no teaching, suggestion, or motivation to modify Wharton to include foam in the foot half(ves) as is taught and claimed in the present application. There is also no teaching or suggestion as to where to locate the foam if it is added to Wharton, e.g., in the numerous ribs,

corrugations, or elsewhere. While the Examiner rejects these arguments, he provides no articulated reasoning otherwise. Hence, no *prima facie* case of obviousness has been established.

It is also noted that, when taken as a whole, Wharton teaches a need for a lightweight pallet and thereby actually teaches away from combining the foam disclosed in Daley with the feet disclosed in Wharton because foam would increase the overall pallet weight. Wharton specifically discloses that his “major objective is to impart to the pallet greatest stiffness and strength with the use of the *least* amount of material...” (Col. 1, lines 19-27) As such, again, Wharton teaches away from using an additional material, e.g., foam, in the pallet. Since there is no suggestion or motivation to make the proposed modification, Wharton in light of Daley fail to render the Applicants’ claims obvious.

The Examiner contends

It would have been obvious and well within the level of ordinary skill in the art at the time the invention was made to modify the structure of Wharton to include foam inserts as taught by Daley to provide increased strength since such structures are conventional alternative structures used in the same intended purpose.

(OA 05/06)

Applicants note that obviousness is not based upon what an artisan could do or what an artisan may try, but is based upon what an artisan would be motivated to do with an expectation of success. “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, No. 04-1616 (CAFC March 22, 2006) citing *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002); and *In re Rouffett*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998). “When the [Examiner] does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, [it is] infer[ed] that the [Examiner] used hindsight to conclude that the invention was obvious.” *Id.*

Here, the Examiner relies upon a merely conclusory statement, e.g., that “such structures are conventional alternative structures used in the same intended purpose”, to allegedly attain the claimed invention. There is no teaching, suggestion, or motivation to combine the foam inserts and feet, and there is no expectation of success. There is no explanation of how such combination would, could, or might affect the properties of the pallet. No motivation (besides a

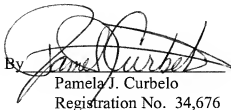
merely conclusory statement) and no expectation of success have been provided. No *prima facie* case of obviousness has been established. Reconsideration and withdrawal of this rejection are respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejections and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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